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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,269	07/12/2001	Dennis L. Matthies	INTL-0571-US (P11416)	2029

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EXAMINER

DONG, DALEI

ART UNIT PAPER NUMBER

2875

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,269

Applicant(s)

MATTHIES, DENNIS L.

Examiner

Dalei Dong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,458,005 to Baker in view of U.S. Patent No. 5,756,147 to Wu.

Regarding to claims 1-20, Baker discloses in Figure 2, "at block 52 a tile 22 (*second sheet*) is secured to the tile chuck 24 by a vacuum and a cover plate 10 (*temporarily flattening a sheet*) is held in place by a vacuum on vacuum chuck 12. At block 53, the compliance is turned on (i.e., the pistons 48 are disengaged from the linear clutch 44) and the motor 30 is actuated to lower the tile chuck carrier 28. The tile 22 is brought into intimate contact with the cover plate 10, regardless of the tolerances on either the cover plate 10 or tiles 14 at block 54 (*secure flatten sheet to second sheet while continuing to hold sheet in a flattened configuration*). This alignment is the "zero" gap position. A sensor 31 may be used to detect when alignment has been achieved. In block 55, the compliance is turned off (i.e., the pistons 48 are pressed into the linear clutch 44), locking the chucks 24 in this position. Then, at block 56, the tile chuck carrier 28 is raised. This allows for the dispensing of a transparent adhesive, as described for example in co-pending application Ser. No. 09/082,287. At block 57, the

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chuck carrier 28 returns the chucks with tiles to the cover plate 10, and lowers them onto the cover plate 10. The chuck carrier 28 has the ability to accurately lower the tiles onto the cover plate 10. The tiles are lowered to a position that is 0.004" higher than the "zero" gap position with lead screw 38. Thus, the accuracy between the tiles 22 and cover plate 10 is achieved. FIG. 1 shows one such compliant chuck, however it is understood that several such chucks may be placed within chuck housing 16. For example, four chucks may be arranged in a four-square pattern for assembling four LCD tiles to form a larger display" (column 2, line 62 to column 3, line 19).

However, Baker does not disclose the processing of the sheet. Wu teaches in Figures 1 and 2, "the laminate 10 is built from the rear side on a substrate 12 (*sheet held in a flattened configuration*). A rear electrode layer 14 is formed on the substrate 12. As shown in the Figures, for display applications, the rear electrode 14 consists of rows of conductive address lines (*row electrode*) centered on the substrate 12 and spaced from the substrate edges. A electric contact tab 16 protrudes from the electrode 14. A first, thick dielectric layer 18 is formed above the rear electrode 14, followed by a second, thinner dielectric layer 20 (*either dielectric layer can be the integrator plate*). A phosphor layer 22 (*light emitting layer, also it is old and well known in the art to utilize an organic light emitting material for an electroluminescent device*) is formed above the second dielectric layer 20, followed by a front, transparent electrode layer 24. The front electrode layer 24 is shown in the Figures as solid, but in actuality, for display applications, it consists of columns of address lines (*column electrode*) arranged perpendicular to the address lines of the rear electrode 14. The laminate 10 is

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encapsulated with a transparent sealing layer 26 (*second sheet*) to prevent moisture penetration. An electric contact 28 is provided to the second electrode 24" (column 10, line 56 to column 11, line 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the vacuum chucks and method of Baker to manufacture the electroluminescent device of Wu in order to securely lock the flattened supports in place while minimizing wrap and disturbance occurring in the supports, and furthermore accurately laminated and process the supports of the device.

Response to Arguments

3. Applicant's arguments filed September 25, 2003 have been fully considered but they are not persuasive.

In response to Applicant's primary argument that Baker fails to suggest or taught to process the sheet in the temporary flattened configuration. Examiner asserts that Baker teaches the use of the vacuum tile chuck, which places the sheets to be assembled in vacuum, and in order to achieve vacuum the sheet to be assembled is temporarily flattened. Thus, Examiner asserts that the Baker reference is valid and maintains the rejection.

Also, in response to Applicant's argument that Baker reference teaches the away from the claimed invention that the sheet may be processed in the flattened configuration; Examiner asserts that Baker teaches the flattened of the sheet in the form of a vacuum tile chuck and process the sheets to form the display. Applicant merely claims the processing

of the sheets and nowhere in the claims does the Applicant claim the processing of the sheet by adding components to the sheet. Thus, Examiner asserts that the Baker reference is valid and maintains the rejection.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (703)308-2870 (after January 14, (571) 272-2378). The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703)305-4939 (after January 14, (571) 272-2378).

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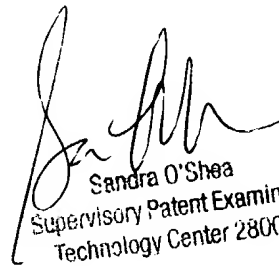
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The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

D.D.
November 29, 2003



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800